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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,688	04/14/2004	Christopher J. Sewall	60382USA	8069
7590		02/03/2010		
Paul A. Fair Patent Administrator FMC Corporation 1735 Market Street Philadelphia, PA 19103				
EXAMINER				
WHITE, EVERETT NMN				
ART UNIT		PAPER NUMBER		
1623				
MAIL DATE		DELIVERY MODE		
02/03/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/824,688

Applicant(s)

SEWALL ET AL.

Examiner

EVERETT WHITE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2009.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-28 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/06)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

1. In view of the Brief on Appeal filed on September 30, 2009, PROSECUTION IS HEREBY REOPENED. New grounds of rejections are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Shaojia Anna Jiang/

Supervisory Patent Examiner, Art Unit 1623

2. The amendment filed July 1, 2009 has been received, entered and carefully considered. The amendment affects the instant application accordingly:

- (A) Claims 29-45 have been canceled;
- (B) Comments regarding Office Action have been provided drawn to:
 - (I) 103(a) rejection, rendered moot by new ground of rejection over newly cited US Publication.

3. Claims 1-28 are pending in the case.

Claim Rejections - 35 USC § 103

New Grounds of Rejection

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonsson et al (US Patent No. 6,967,037, already of record) in view of Guiseley (US Patent No. 4,443,486, already of record) and Resch (US Publication No. 2004/0192907, newly cited).

Applicants claim a homogeneous, thermoreversible gel comprising carrageenan wherein said carrageenan has a viscosity of 5 to less than 10 cP at 75 °C when measured in a 0.10 molar aqueous sodium chloride solution containing 1.5% by weight of said carrageenan based on the weight of all components in said solution, and optionally at least one of a plasticizer, a second film former, a bulking agent, and a pH controlling agent, wherein said gel has a solids content of at least 40% and said

carrageenan is present in an amount of at least 70% of all carrageenan present in said gel.

The Jonsson et al patent discloses a food composition in the form of a gel, comprising soluble solids in the range of about 50% to about 90% by weight, a carrageenan component in an amount sufficient to form a gel, and water to balance (see abstract). The carrageenan component of the Jonsson et al patent may be an iota carrageenan or a kappa carrageenan or mixtures thereof, preferably in an amount of about 0.25 to 10.0% by weight (see column 6, lines 31-33). The carrageenan and amount of solids disclosed in the Jonsson et al patent embraces the carrageenan and solids content recited in instant Claims 1-5 and 15-21. The Jonsson et al also discloses a sweetening component in the composition, which may be selected as a sugar alcohol, which include sorbitol, lactitol, and maltitol (see column 6, 2nd paragraph). The Jonsson et al patent discloses that the composition may comprise additional hydrocolloids selected from a group that include pectin, celluloses, alginates and gellan (see column 6, 9th paragraph). The Jonsson et al patent further discloses the composition comprising bulking agents such as polydextrose. The sugar alcohols, hydrocolloids, and bulking agents of the Jonsson et al patent embraces the plasticizers, second film formers recited in instant Claims 8 and 24-26. The food composition of the Jonsson et al patent further embraces the edible product of instant Claim 28.

The instantly claimed gel differ from the gelled food composition of the Jonsson et al patent by claiming that the viscosity of the carrageenan is 5 to less than 10 cP, which is not disclosed in the Jonsson et al patent.

However, the Guiseley patent, which discloses the present of carrageenan in milk products, shows carrageenan having the instantly claimed viscosity measurement is known in the art. Guiseley discloses preparation of a *Eucheuma cottonii* carrageenan extract that involve the extract undergoing hydrolysis which decreases the viscosity of a 1.5% water solution of the extract at 75°C to within the range of from about 5 to 20 mPa.s (see column 6, 3rd paragraph), which covers the viscosity measurement of the carrageenan recited in instant Claim 1. The Guiseley patent also discloses enhancement of the *Eucheuma cottonii* carrageenan being accomplished by treatment

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of the extract in the presence of calcium, sodium, potassium and magnesium salts (see column 6, line 54 to column 7, line 15), which embraces the subject matter of instant Claims 9-14.

Moreover, the Resch et al publication is cited to show that the gelling temperatures for carrageenan recited in instant Claims 3-5 are known in the art. See page 3, lines 1-3 of paragraph No. 0022 of the Resch et al publication wherein it is disclosed that the gelation temperature for carrageenan is typically between about 30 and 50 degrees C., which embraces the subject matter of instant Claims 3-5. The Resch et al publication also discloses that dry carrageenan powder can have a viscosity of between about 10 and 40 mPa.s (see line 5 of paragraph No. 0026), which embraces the viscosity measurement recited for carrageenan in instant Claims 1 and 25. The Resch et al publication further discloses the use of ionic components such as potassium chloride to assist in the control of the viscosity of carrageenan, which embraces the subject matter of instant Claims 9-14.

One of ordinary skill in this art would be motivated to combine the teaching of the Jonsson et al patent with the teaching of the Guiseley patent and the Resch et al publication since each of the references disclose the use carrageenan in food compositions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate into the carrageenan containing gelled food composition of the Jonsson et al patent a carrageenan having a viscosity of 5 to 10 mPa.s and a gelation temperature of less than 60° C in view of the recognition in the art, as evidenced by the Guiseley patent and Resch et al publication, that carrageenan having such viscosity are effective in stabilizing food products.

Summary

6. All the pending claims (Claims 1-28) are rejected.

Examiner's Telephone Number, Fax Number, and Other Information

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is 571-272-0660. The examiner can normally be reached on 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Everett White/

Examiner, Art Unit 1623

/Shaojia Anna Jiang/

Supervisory Patent Examiner, Art Unit 1623